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AVERAGE WEIGHT OF RABBITS AT WEANING AGE

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The tendency to exaggerate or to be a trifle careless with the truth, which seems to be quite prevalent among fishermen, hunters, and amateur golfers, has also had its influence among rabbit breeders. The numerous "below par" attainments are easily forgotten, perhaps largely because they are seldom reported. The tales that rabbit breeders tell about consistently producing 5-pound rabbits at weaning age probably were originated primarily for the purpose of hoaxing a fellow breeder or an unsuspecting prospect. When, however, the breeders telling such tales begin really to believe them themselves, the situation becomes a trifle preposterous. Five-pound rabbits at 8 weeks of age are like the climatic changes in California--they are quite unusual. To produce regularly rabbits weighing 4 pounds, or better, at weaning age (8 weeks) should be the ambition of every progressive rabbit breeder, for the profit in rabbit-meat production is directly dependent on the maximum amount of gain produced economically in the shortest possible time. Yet even then the only practical basis for safe and accurate judgment as to what a breeder can expect is the average and not the exceptional weight.

The primary purpose of the U. S. Rabbit Experiment Station, at Fontana, Calif., is to test various methods of management and kinds of feeds and then to pass the findings thus obtained on to the rabbit breeders to serve as a guide for more profitable rabbit production. The director of the station, in addition to carrying on other experimental work, is studying selective breeding and modified rations in an endeavor to produce a heavier animal at 8 weeks more economically.

This leaflet discusses the actual weights taken of 1,903 rabbits weaned at 8 weeks during the years 1933 and 1934. These rabbits were fed on 13 different rations (most of which had a nutritive ratio of 1:3.7) composed of different cereals and different protein supplemental feeds. A good grade of alfalfa hay constituted 60 percent of the rations at all times. The young rabbits and their mothers were weighed once each week. Some of the does were bred 28 days after kindling, some 42 days, and others 56 days. Some of these practices are, however, not recommended; in fact, after one year's trial one of them was abandoned as harmful. Whenever a doe's litter was reduced to 2 individuals or less, she was rebred immediately, and if any of her previous litter were still with her 2 or 3 days before the time she was due to kindle again, they were weaned. All young in the litter in excess of 7 were destroyed the first day after birth. For experimental reasons there were no transfers of young from one doe to another. Good rabbit-husbandry practices would require that the does be so bred that several would kindle at one time, and that then the young be so distributed to the various does as to make the number in each litter uniform. New Zealand rabbits were used in the experiment because at the time the Rabbit Experiment Station was established (1927) in California that breed was the one commonly used for commercial rabbit production in that section. Rabbit breeders donated the foundation stock.

By reference to figure 1 it will be seen that the 1,903 eight-weeks-old rabbits from 410 litters ranged in weight from 1.5 pounds to 5.3 pounds but that there were few of either extreme. The most common weight was 3.2 pounds, 10 percent (190 animals) of the total number attaining this weight. The grand average of all 1,903 individuals was 3.25 pounds; this indicates that there were about as many rabbits that weighed less than the popular weight of 3.2 pounds as there were that weighed more. The solid line shows the relative distribution of the females and the broken line that of the males. There is no significant difference in weight of either sex at 8 weeks of age.

When these 1,903 animals are listed according to month in which weaned, some interesting comparisons can be made that are difficult to explain (fig. 2). The greatest average weight (3.55 pounds) was attained in January; December, June, and August animals averaged 3.4 pounds; while the lightest average weight (3.0 pounds) occurred in March. A progressive increase is noted from the low average of March to the June and August average of 3.4 pounds, and then a decline occurs to an average weaned weight of 3.1 pounds in October.

Undoubtedly an important factor in the unsatisfactory fall gains is the molting. A partial explanation for the lower weaned weights during February and March is that the size of the litters weaned during those months was larger than during the other periods (fig. 3). The litters for these two months averaged 5.1 animals. The smallest average number of weaned young per litter was 3.8 in June and November. The total 410 litters weaned averaged 4.64 animals. Litters containing 7 young formed 15 percent; those having 6 young formed 22 percent; 5 young, 18 percent; 4 young, 20 percent; 3 young, 11 percent; 2 young, 9 percent; and only 1 young, 5 percent.

Only 7.8 percent, or 148 young rabbits, of the total 1,903 weighed more than 4.2 pounds; 25 percent of these were in litters of 6. More than one-fifth of the rabbits in litters of 3 weaned young weighed more than 4 pounds at 8 weeks of age.

These are the facts as found by careful weighing and recording at the Rabbit Experiment Station, but there still are innumerable loopholes for rabbit breeders to laud their own particular attainments in producing unbeatable weights. Here are some of their possible lines of approach: Secret formulas of feeding; a different breed (a most fertile field for enthusiastic claims); the best strain within a given breed; varying climatic conditions; and finally, the best and only good management practices. The field is wide open, but would it not be advisable at least to restrict the weights to a definite age in days rather than use the vague and indefinite term "weaning time"?

In actual practice the thoughtful rabbit breeder should get greater weights than those obtained at the Rabbit Experiment Station, because of the absence of the disturbances and restrictions incidental to periodical weighing and other experimental procedure. By all means every breeder should constantly strive to better his attainments by economical feeding, by businesslike methods of management, and by intelligent selective matings. The 5-pound average at 8 weeks is not impossible, perhaps, in particular rabbitries, but such cases are at present rather rare.

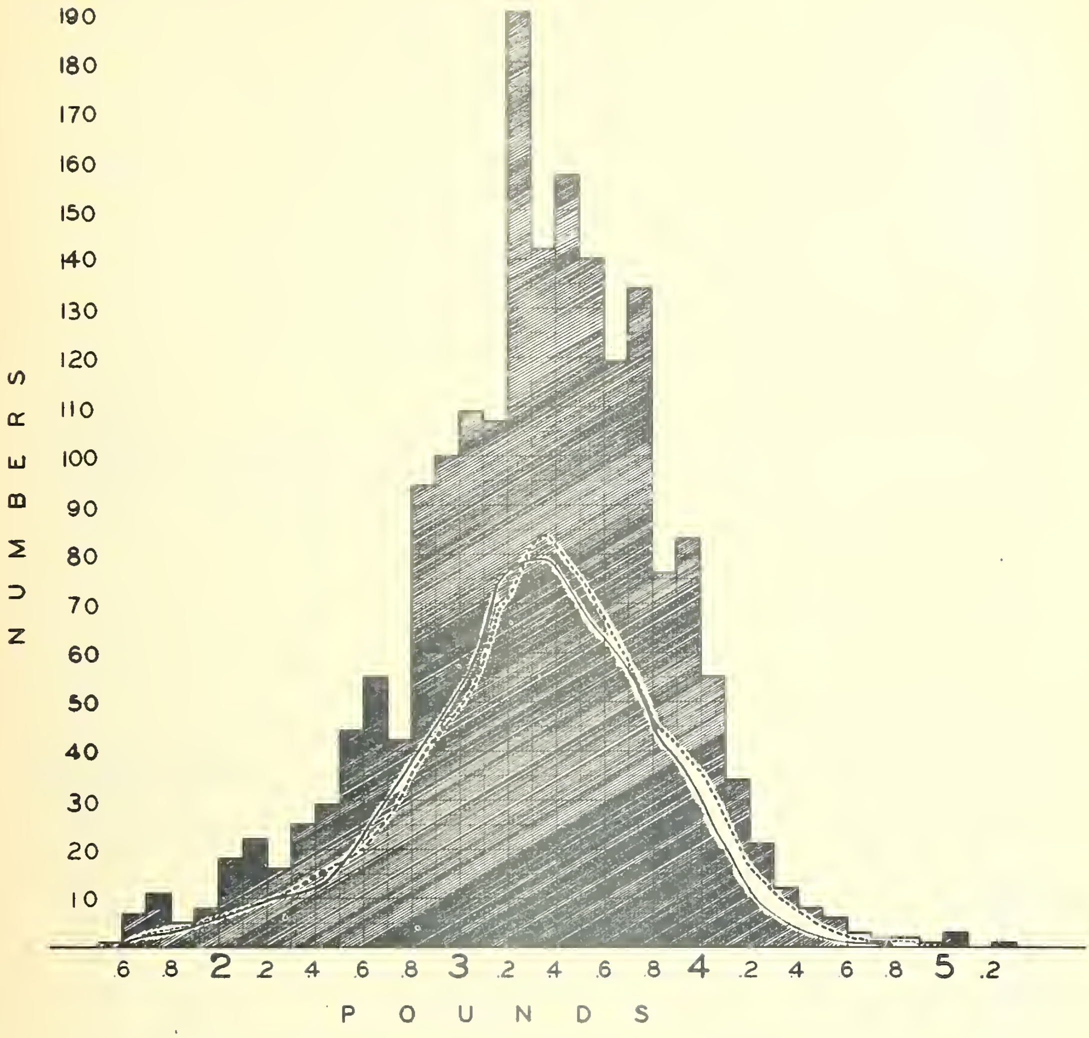

FIGURE 1.--Relative distribution according to weight at 8 weeks of age of 1,903 rabbits produced at the U. S. Rabbit Experiment Station, Fontana, Calif., during the 3 years 1932-34. Broken line denotes distribution of males in the litters; solid line, females.

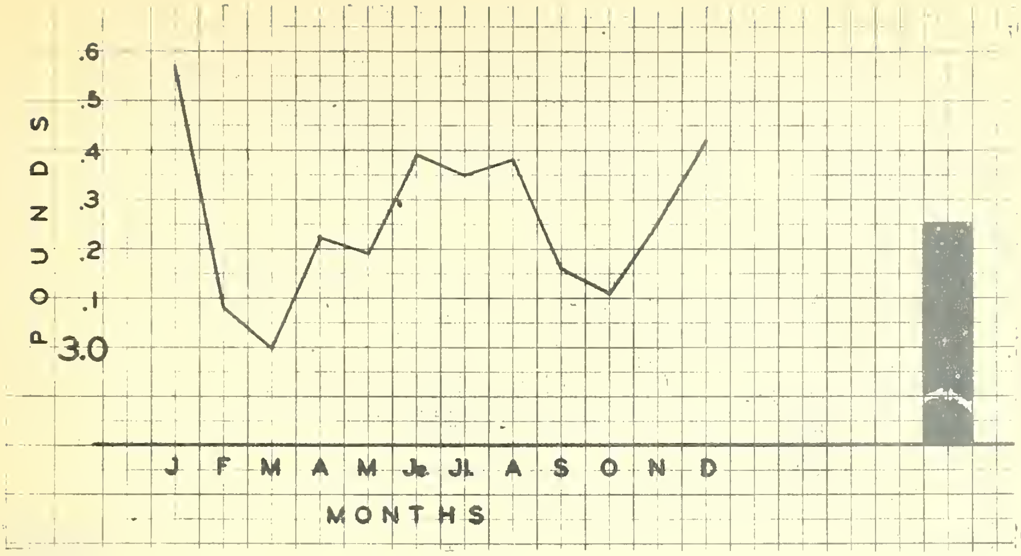

FIGURE 2.--Average weight of 1,903 eight-weeks-old rabbits by the months when weaned. Average weight (3.25 pounds) of total number indicated by column at the right.

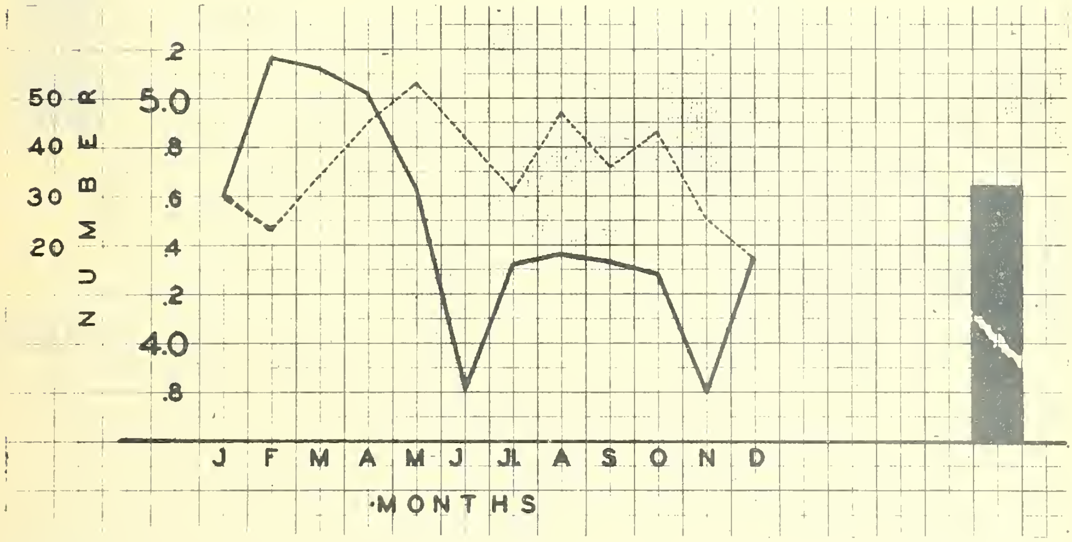

FIGURE 3.--Solid line shows the average size of all litters weaned within each month. Dotted line indicates the number of litters weaned within each month as represented by the numerals at the extreme left. The column at the right illustrates the average size of litter of the total 410 litters.